



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,886	12/13/2000	Kazunori Horachi	FUJI 18.106	9307

7590 05/05/2004

HEIFGOTT & KARAS, P.C.
60th Floor
EMPIRE STATE BUILDING
NEW YORK, NY 10118

EXAMINER

SHEW, JOHN

ART UNIT	PAPER NUMBER
----------	--------------

2664

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/735,886

Applicant(s)

HORACHI, KAZUNORI

Examiner

John L Shew

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Dochi.

Claim 1, Dochi teaches an apparatus for transmission between a subscriber terminal and digital switches (Fig. 2) referenced by ISDN unit 1, that employ a 4:1 time-division-multiplexing scheme (Fig. 2) referenced by 4:1 TDM ISDN exchange 3, comprising a main path for carrying signals between the subscriber terminals and digital switches (Fig. 2) referenced by 2B+D processing unit 14, a control path which is separate from said main path and carries control information for maintenance purpose (Fig. 2) referenced by EOC processing unit 16, an interface-&-control unit which converts the control information to conform to specifications of the digital switch (Fig. 2) referenced by switch setting receiver (provisioning) 22, the conversion is based on switch settings

Art Unit: 2664

made to said interface-&-control (Fig. 2) referenced by P.C. 6 control of switch setting receiver (provisioning) 22 unit.

Claim 2, Dochi teaches a cross-connect unit which provides cross connections (Fig. 2) referenced by switching unit 17, and switches between the 4:1 time-division-multiplexing scheme and a 3DS0 time-division-multiplexing scheme (ABSTRACT) referenced by "To allow an ISDN subscriber system transmitter to match an ISDN exchange compatible with both a transmission line for the 3-DS0.TDM system and a transmission line for the 4:1 TDM system".

Claim 3, Dochi teaches a multiplexing/demultiplexing unit serving as interface for analog switches (Fig. 2) referenced by MUX/DMUX unit 2, a cross-connect unit (13) which selects said multiplexing/demultiplexing unit as interface to establish connection between the subscriber terminals and 3DS0 TDM (Fig. 2) by choosing MUX/DMUX INF 1' or MUX/DMUX INF 2. The selection of 3DS0 TDM inherently is a selection of an analog switch connection.

Claim 4, Dochi teaches notification information from the subscriber-side unit to the digital switch (Fig. 4, column 6 lines 43-50, column 7 line 1) referenced by types of notification information byte 6, which is obvious to include alarm notification information.

Claims 5 and 6, Dochi teaches subscriber-side interface unit is provided with a function of EOC/eoc and EOC/l bit conversion (column 2 lines 10-24, Fig. 2) referenced by the M channel comprising of crc, febe, eoc and l bits which is converted by EOC processing unit 16.

Claim 7, Dochi teaches a cross-connect unit which provides cross connections (Fig. 2) referenced by switching unit 13, and switches between the 4:1 TDM scheme and a 3DS0 TDM scheme (ABSTRACT) referenced by "To allow an ISDN subscriber system transmitter to match an ISDN exchange compatible with both a transmission line for the 3-DS0.TDM system and a transmission line for the 4:1 TDM system".

Claim 8, Dochi teaches the apparatus has service statuses and provisioning set through remote controlling (Fig. 2) referenced by remote unit P.C. 6 setting the service statuses through switch setting receiver (provisioning) unit 22.

Claim 9, Dochi teaches the cross-connect unit is provided with a function of establishing cross connection between any given subscriber and any given switch through a multiplexing/demultiplexing unit (Fig. 2) referenced by switching unit 13 selecting between users NT1 5-1, NT2 5-2, and MUX/DMUX INF 11 and 12 for the particular switch.

Claim 10, Dochi teaches a multiplexing/demultiplexing unit serving as an interface for analog switches (Fig. 2) referenced by MUX/DMUX Interface units 11 and 12, a cross-connect unit which selects multiplexing/demultiplexing unit as interface to establish connection between the subscriber and switch (Fig. 2) referenced by switching unit 13.

Citation of Prior Art

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent 5640387, Takahashi discloses a digital loop carrier apparatus for digital signal transmission. Patent 6282204, Balatoni discloses an ISDN voice multiplexer system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Shew whose telephone number is 703-305-8708. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

js

A handwritten signature in black ink, appearing to read 'W. Chin', with a long horizontal line extending to the right.

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600